



*The Riley Group, Inc.*

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August 4, 2009

Mr. David Gibson  
Les Schwab Tire Centers  
646 NW Madras Highway  
Prineville, Oregon 97754

**RE: Groundwater Monitoring Event – Third Quarter 2009  
Les Schwab Tire Center  
2311 Commercial Avenue  
Anacortes, Washington  
RGI Project # 2007-092B**

Dear Mr. Gibson:

This letter report documents The Riley Group Inc.'s (RGI's) field protocols and findings associated with the sampling of the groundwater extraction well (EW-1) located at the Les Schwab Tire Center in Anacortes, Washington (referred to hereafter as the Site).

Authorization to implement the scope of work outlined in this quarterly groundwater monitoring report was provided by you (Client) on August 27, 2007.

### **SITE LOCATION & DESCRIPTION**

The Site, located at 2311 Commercial Avenue is currently occupied by a Les Schwab Tires Center. RGI understands that the subject Site is currently owned by Les Schwab Tire Centers Corporation. In November 2007, RGI conducted an interim cleanup action for soil and groundwater at the subject Site associated with a petroleum release from a leaking hydraulic hoist. The remedial excavation initially contained floating free-product oil-range Total Petroleum Hydrocarbons (TPH) on the groundwater surface. Following the remedial activities, Walgreen's contractor installed a 4-inch diameter groundwater extraction well (EW-1) in the former source area to remove impacted groundwater and to monitor groundwater quality at the Site.

### **PROJECT OBJECTIVES**

The objective of this project was to perform groundwater sampling on the on-site groundwater extraction well to document groundwater quality in the former source area. Based on historical data, the contaminant of concern is oil-range TPH.

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#### **SERVING THE PACIFIC NORTHWEST**

*North Puget Sound - Corporate Office*  
17522 Bothell Way NE, Suite A  
Bothell, WA 98011  
Phone 425.415.0551 ♦ Fax 425.415.0311

*South Puget Sound Office*  
7406 – 27<sup>th</sup> Street West, Suite 301  
University Place, WA 98466  
Phone 253.565.0552 ♦ Fax 253.460.2981

*Eastern Washington & Oregon Office*  
1838 South Washington Street  
Kennewick, WA 99337  
Phone 509.586.4840 ♦ Fax 509.586.4863

## **DEWATERING WELL SAMPLING EVENT**

### **GROUNDWATER SAMPLE COLLECTION**

On July 21, 2009, a single groundwater sample, EW1-Q3, was collected following purging the well of three volumes of water using an electric Wale™ submersible pump.

Depth to groundwater, recorded using an electronic water level indicator, was 2.84 feet below ground surface (bgs).

Following groundwater purging activities, the well was left to recharge to at least 80% of its original water level prior to sampling. The well was sampled using the electric Wale™ pump and disposable plastic tubing under low-flow conditions.

The groundwater sample EW1-Q3 was collected in a laboratory-supplied 500 milliliter amber bottle. Sample containers were placed in an ice-chilled cooler and transported to the analytical laboratory under proper chain-of-custody documentation.

### **LABORATORY ANALYSIS**

Groundwater sample EW1-Q3 was submitted to Friedman & Bruya, Inc. of Seattle, Washington, and analyzed for the following contaminants of concern:

- Diesel- and Oil-Range TPH (TPH-Dx) using Northwest Test Method NWTPH-Dx with silica gel cleanup<sup>1</sup>.

A copy of the laboratory report and sample chain-of-custody are attached to this letter report (Appendix A).

<sup>1</sup> Silica gel filtration prior to analysis removes biogenic material that may interfere with diesel- and oil-range analyses, potentially yielding falsely elevated results.

## **FINDINGS**

Analytical results and the MTCA Method A Groundwater Cleanup Levels for the contaminants of concern are summarized in Table 1. Oil-range TPH was not detected above the laboratory detection limit of 250 ug/L. Diesel-range TPH was detected at a concentration of 150 ug/L which is below the MTCA Method A Cleanup Level of 500 ug/L.

## **FUTURE PLANNED ACTION**

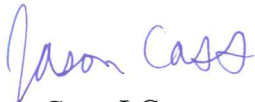
RGI is scheduled to perform the next quarterly sampling of the extraction well, EW-1, again on November 21, 2009.

### PROJECT LIMITATIONS

Work for this project was performed, and this report prepared, in accordance with generally accepted professional practices for the nature and conditions of work completed in same or similar locations at the present time. RGI's results and findings from the select area do not necessarily reflect soil or groundwater conditions underlying other areas of the Site not investigated. RGI reserves the right to modify its conclusions and/or recommendations as new data and information is made available. No legal or other warranty, expressed or implied, is made.

Any questions regarding our work or this report, the presentation of information, or interpretation of data are welcome and should be referred to the undersigned.

Sincerely yours,



Jason Cass, LG  
Senior Geologist



Paul D. Riley, LG, LHG  
Principal

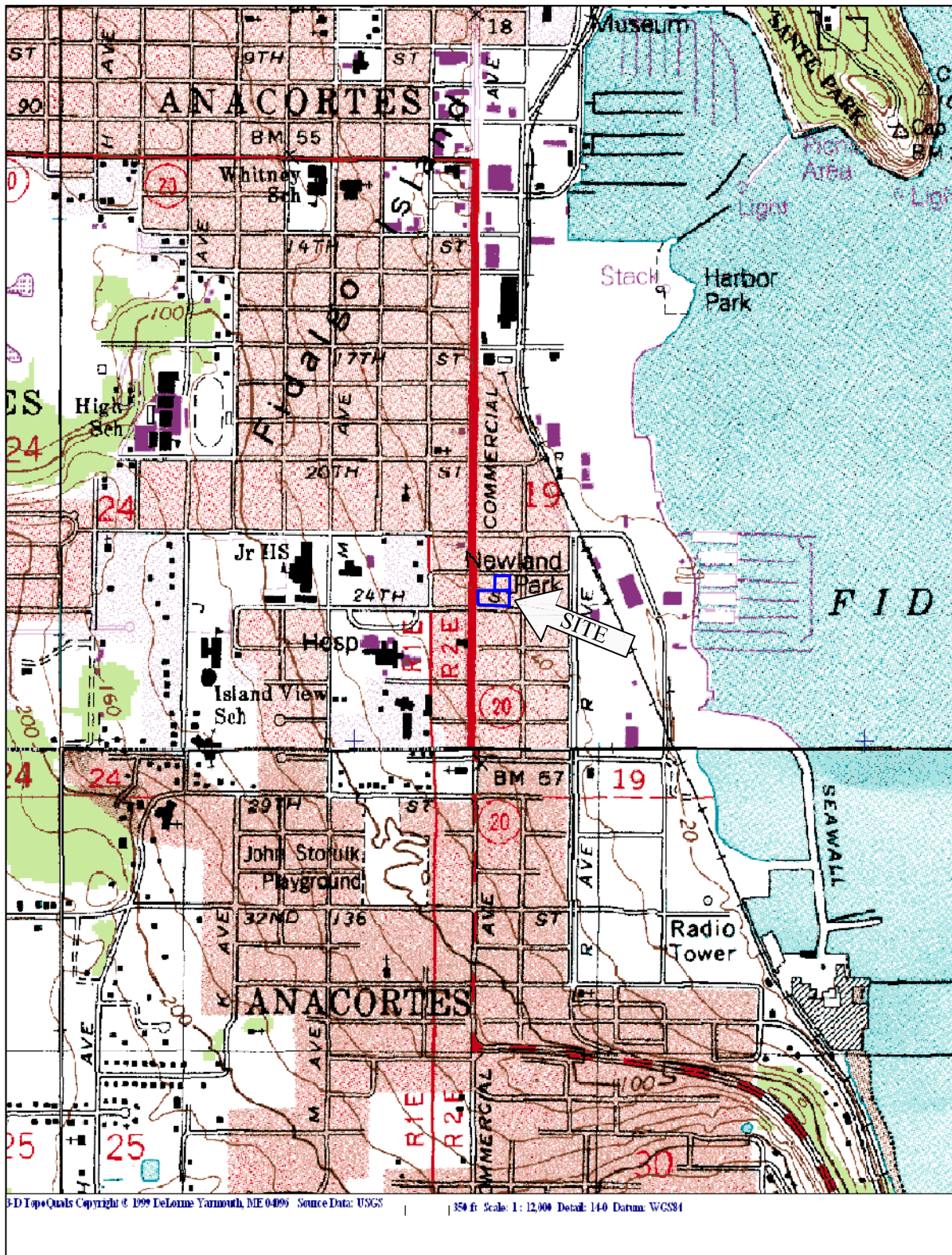
*Attachments:*

*Figures 1, 2 & 3  
Table 1  
Analytical Laboratory Report*

*Report Distribution:*

*Mr. David Gibson, Les Schwab, Inc. (two copies & electronic pdf)*





0 350' 700' 1,400'  
Approximate Scale In Feet

USGS, 1995, Anacortes North,  
Washington,  
7.5x15-Minute Quadrangle



**The Riley Group, Inc.**  
17522 BOTHELL WAY NE  
BOTHELL, WASHINGTON 98011

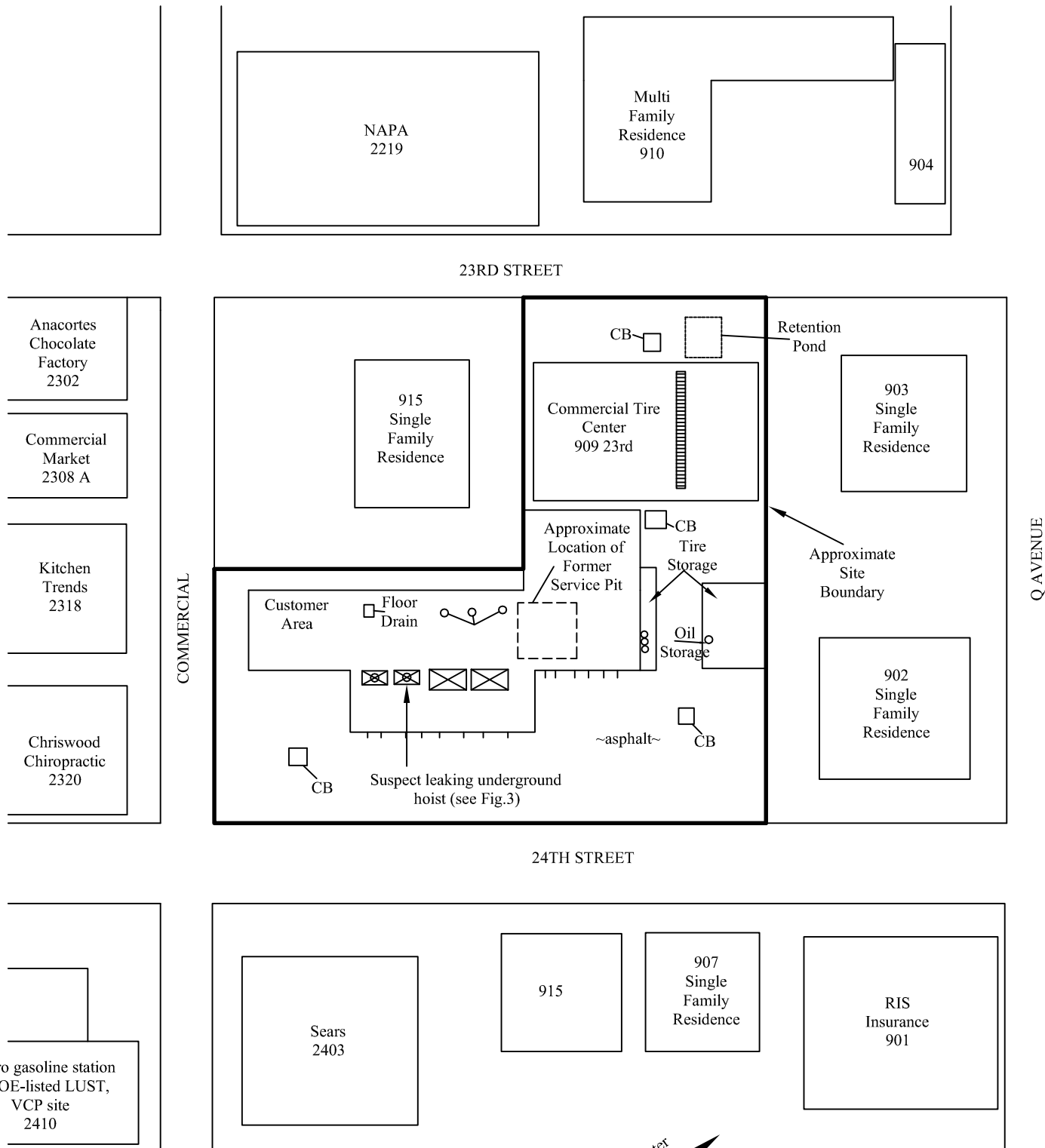
*Anacortes Les Schwab Tire Center*

*Project # 2007-092B*

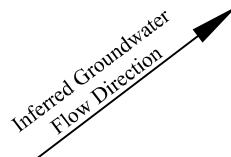
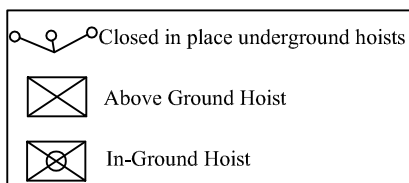
*Address: 2311 Commercial Avenue, Anacortes, Washington*

*Figure 1*

*Site Vicinity Map*



Legend:



*Drawing Not to Scale*



**The Riley Group, Inc.**  
17522 BOTHELL WAY NE  
BOTHELL, WASHINGTON 98011

*Anacortes Les Schwab's*

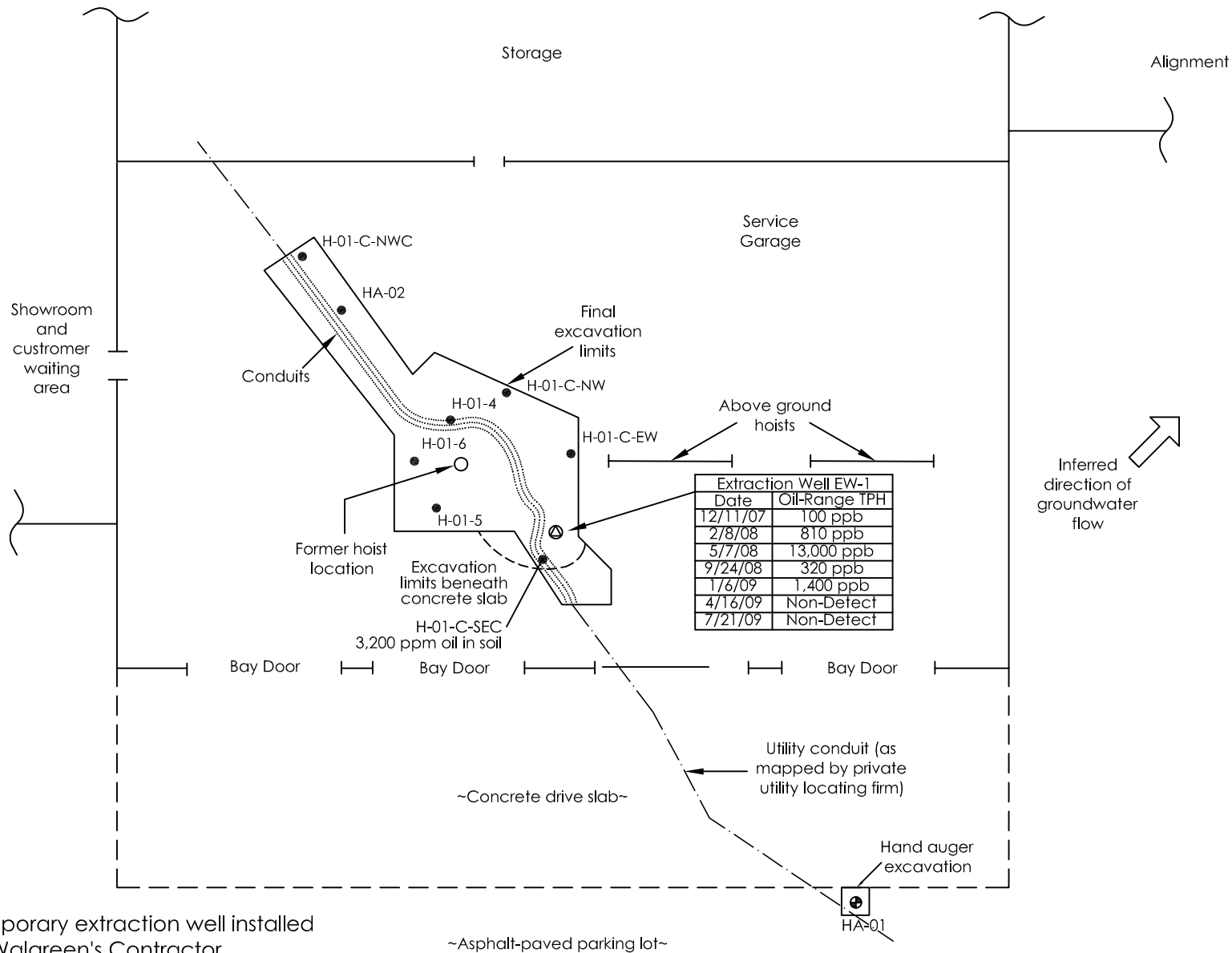
*Project #  
2007-092B*

*Site & Vicinity Sketch*

*Figure 2*

*Date Drawn:  
08/04/09*

*Address: 2311 Commercial Avenue, Anacortes, Washington*



**The Riley Group, Inc.**  
 17522 BOTHELL WAY NE  
 BOTHELL, WASHINGTON 98011

*Anacortes Les Schwab Tire Center*

*Figure 3*

*Project Number  
 2007-092B*

*Site Sketch & Sample Locations*

*Date Drawn:  
 08/04/09*

*Address: 2311 Commercial Street, Anacortes, Washington*

**Table 1. Summary of Groundwater Sample Results - Third Quarter 2009.****Anacortes Les Schwab****2311 Commercial Avenue, Anacortes, Washington****The Riley Group, Inc. Project #2007-092B**

Sample Number	Sample Date	Depth to Groundwater (feet bgs)	Diesel TPH	Oil TPH
<i>3rd Quarter, 2009, Sampling Event</i>				
EW1-3Q	7/21/2009	2.84	150	ND
<i>2nd Quarter, 2009, Sampling Event</i>				
EW1-2Q	4/16/2009	2.22	61	ND
<i>1st Quarter, 2009, Sampling Event</i>				
EW1-1Q	1/6/2009	2.8	480 x	<b>1,400</b>
<i>3rd Quarter, 2008, Sampling Event</i>				
EW1-3Q	9/24/2008	1.06	160 x	320
<i>2nd Quarter, 2008, Sampling Event</i>				
EW1-2Q	5/5/2008	1.4	<b>5,000</b>	<b>13,000</b>
<i>1st Quarter, 2008, Sampling Event</i>				
H1-01	2/7/2008	4.5	260	<b>810</b>
<i>Initial December 2007, Sampling Event</i>				
H1-01	12/17/2007	3.5	ND	100
<b>MTCA Method A Cleanup Levels</b>			500	500

Groundwater samples collected from the extraction well, EW-1, were collected by The Riley Group, Inc.

using an electric Wale pump.

Unless otherwise noted, all analytical results are given in micrograms per liter (ug/L), equivalent to parts per billion  
feet bgs = feet below grade surface.

Diesel TPH, diesel range total petroleum hydrocarbons determined using Ecology Test Method NWTPH-Dx with  
silica gel cleanup.

Oil TPH, heavy oil range total petroleum hydrocarbons determined using Ecology Test Method NWTPH-Dx with  
silica gel cleanup.

ND, non-detect, contaminant not detected at noted analytical detection limit.

--, Not analyzed or not applicable.

x = The pattern of peaks present is not indicative of diesel.

**Bold** and shaded concentrations (if any) exceed MTCA Method A Groundwater Cleanup Levels.

MTCA, Washington State Department of Ecology Model Toxics Control Act (WAC 173-340-900, Table 720-1).

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

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Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

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e-mail: fbi@isomedia.com

July 29, 2009

Jason Cass, Project Manager  
The Riley Group, Inc.  
17522 Bothell Way NE  
Bothell, WA 98011

Dear Mr. Cass:

Included are the results from the testing of material submitted on July 22, 2009 from the 2007-092B, F&BI 907231 project. There are 4 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
TRG0729R.DOC



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 22, 2009 by Friedman & Bruya, Inc. from the The Riley Group, Inc. 2007-092B, F&BI 907231 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID  
907231-01

The Riley Group, Inc.  
EW1-Q2

All quality control requirements were acceptable.

Date of Report: 07/29/09

Date Received: 07/22/09

Project: 2007-092B, F&amp;BI 907231

Date Extracted: 07/23/09

Date Analyzed: 07/24/09

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLES  
FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL AND MOTOR OIL**

**USING METHOD NWTPH-Dx  
Sample Extracts Passed Through a  
Silica Gel Column Prior to Analysis**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C <sub>10</sub> -C <sub>25</sub> )	<u>Motor Oil Range</u> (C <sub>25</sub> -C <sub>36</sub> )	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-137)
EW1-Q2 907231-01	150	<250	75
Method Blank	<50	<250	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/29/09

Date Received: 07/22/09

Project: 2007-092B, F&BI 907231

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER  
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS  
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	108	106	71-131	2

**Data Qualifiers & Definitions**

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - The sample was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - The value reported exceeded the calibration range established for the analyte. The reported concentration should be considered an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of diesel.

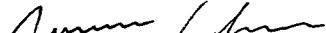
y - The pattern of peaks present is not indicative of motor oil.

907 231

## SAMPLE CHAIN OF CUSTODY

ME 07-22-09 B03

Send Report To Jason Cass  
Company Riley Group Inc.  
Address 17522 Bothell Way NE  
City, State, ZIP Bothell WA 98011  
Phone # 425 415 0551 Fax # 425 415 0311

SAMPLERS (signature) 	
PROJECT NAME/NO. 2007-092 B	PO #
REMARKS	

Page # \_\_\_\_\_ of \_\_\_\_\_

**TURNAROUND TIME**

☒ Standard (2 Weeks)

☐ RUSH \_\_\_\_\_

Rush charges authorized by: \_\_\_\_\_

**SAMPLE DISPOSAL**




☒ Dispose after 30 days

☐ Return samples

☐ Will call with instructions

[illegible]

**Friedman & Bruya, Inc.**  
3012 16th Avenue West  
Seattle, WA 98119-2029  
Ph. (206) 285-8282  
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	Tamara Adams	RGI	7/22/09	9:30
Received by: 	WILMER VERA	CHAMPION	7/22/09	9:30
Relinquished by:				
Received by: 	Phan Phan	FeBI	7/22/09	11:10